

The background of the page features a large, pixelated, grayscale version of the Seal of the Commonwealth of Massachusetts. The seal depicts a Native American figure holding a bow and arrow, with a five-pointed star above his right shoulder. The text is centered over the seal.

**Curriculum Map**  
**Honors Chemistry #223**  
**Saugus High School**  
**Saugus, MA 01906**

Week 1		Week 2	
<b>Performance Standards</b>		<b>Performance Standards</b>	
<p><b>The students will:</b>            Be able to make observations from a scientific perspective.            Be able to read, interpret &amp; examine scientific claims.            Be able to pose questions &amp; form hypotheses based on personal observations, scientific articles, experiments &amp; knowledge.</p>		<p><b>The students will:</b>            Understand the SI units of length, mass &amp; volume.            Be able to measure density and specific gravity.            Be able to measure temperature on the Celsius and Fahrenheit scale.            Be able to use scientific notation.</p>	
<b>Unit/Topic./Lesson</b>		<b>Unit/Topic./Lesson</b>	
Introduction to Chemistry <b>1.1</b> Story of Two Substances <b>1.2</b> Chemistry & Matter <b>1.3</b> Scientific Methods <b>1.4</b> Scientific Research		Analyzing Data <b>2.1</b> Units & Measurements <b>2.2</b> Scientific Notation & Dimensional Analysis	
<b>Objectives (Students will...)</b>	<b>Essential Question</b>	<b>Objectives (Students will...)</b>	<b>Essential Question</b>
<p><b>Define</b> substance.  <b>Explain</b> the formation &amp; importance of ozone.  <b>Describe</b> the development of CFC's.  <b>Compare &amp; contrast</b> mass &amp; wt.  <b>Explain</b> why chemists are interested in sub-microscopic views of matter.  <b>Identify</b> the area of emphasis for various branches of chemistry.  <b>Identify</b> the common steps of the scientific method.  <b>Compare &amp; contrast</b> types of data.  <b>Describe</b> the difference between a theory &amp; a scientific law.  <b>Compare &amp; Contrast</b> pure research, applied research &amp; technology.  <b>Apply</b> knowledge of lab safety.</p>	<p>Why is chemistry a science that is central to our lives?</p>	<p><b>Define</b> SI units for time, length, mass &amp; temp.  <b>Explain</b> how adding a prefix changes a unit.  <b>Compare</b> the derived units for volume &amp; density</p>	<p>Why do chemists collect data?</p>
	<b>Labs/Demonstrations/Handouts</b>		<b>Labs/Demonstrations/Handouts</b>
	<p><b>Demo:</b> Reactivity of 3 Alkali Metals  <b>Demo:</b> Combustion of Mg  <b>Lab:</b> Safety Precautions  <b>Handout:</b> Syllabus</p>		<p><b>Demo:</b> Carbon Tower  <b>Lab:</b> SI Measurement  <b>Handout:</b> Chapter 2 packet</p>
<b>Teacher Resources</b>	<b>Media Resources</b>	<b>Teacher Resources</b>	<b>Media Resources</b>
<ul style="list-style-type: none"> <li>Glencoe Chemistry: Matter &amp; Change (2008) Chapter 1</li> <li>Teacher Works Plus DVD</li> <li>Standardized Test Practice</li> <li>Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>Content Outline WS</li> <li>Transparency Activity WS</li> <li>Enrichment/reinforcement WS</li> <li>Foldables</li> </ul>	<ul style="list-style-type: none"> <li>Interactive Classroom CD-ROM (ppt's)</li> <li>Section Focus transparencies</li> <li>Teaching transparencies</li> <li>Math Skills transparencies</li> <li>Virtual Chemistry Lab CD-ROM</li> <li>Internet labs and resources</li> </ul>	<ul style="list-style-type: none"> <li>Glencoe Chemistry: Matter &amp; Change (2008) Chapter 2</li> <li>Teacher Works Plus DVD</li> <li>Standardized Test Practice</li> <li>Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>Content Outline WS</li> <li>Transparency Activity WS</li> <li>Enrichment/reinforcement WS</li> <li>Foldables</li> </ul>	<ul style="list-style-type: none"> <li>Interactive Classroom CD-ROM (ppt's)</li> <li>Section Focus transparencies</li> <li>Teaching transparencies</li> <li>Math Skills transparencies</li> <li>Virtual Chemistry Lab CD-ROM</li> <li>Internet labs and resources</li> </ul>
<b>Assessment Activities</b>	<b>Completion date:</b>	<b>Assessment Activities</b>	<b>Completion date:</b>
Problem Set #1 Test Chapter 1 Safety Lab Quiz Lab report	<p><b>Completed by:</b></p> <p><b>Comments:</b> <i>Alternative Evaluation:</i>            Paper, Project, Poster</p>	Quiz Chapter 2 (2.1-2.2) Problem Set #2 WS's - Scientific Notation, Metric Conversions, Significant Figures, Lab report	<p><b>Completed by:</b></p> <p><b>Comments:</b> <i>Alternative Evaluation:</i>            Paper, Project, Poster</p>

Week 3	
<b>Performance Standards</b>	
<p><b>The students will:</b>            Be able to use significant figures in measurements and calculations.            Understand the difference between accuracy and precision</p>	
<b>Unit/Topic./Lesson</b>	
Analyzing Data <b>2.3</b> Uncertainty in Data <b>2.4</b> Representing Data	
<b>Objectives (Students will...)</b> <b>Express</b> numbers in scientific notation. <b>Convert</b> between units using dimensional analysis <b>Define &amp; Compare</b> accuracy & precision. <b>Describe</b> the accuracy of experimental data using error and percent error. <b>Apply</b> rules for significant figures to express uncertainty in measured and calculated values. <b>Create</b> graphs to reveal patterns in data. <b>Interpret</b> graphs	<b>Essential Question</b> How do uncertainties in measurement affect the way results are presented?  <b>Labs/Demonstrations/Handouts</b> <b>Lab:</b> Analyzing Data using Graphs
<b>Teacher Resources</b> <ul style="list-style-type: none"> <li>• Glencoe Chemistry: Matter &amp; Change (2008) Chapter 2</li> <li>• Teacher Works Plus DVD</li> <li>• Standardized Test Practice</li> <li>• Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>• Content Outline WS</li> <li>• Transparency Activity WS</li> <li>• Enrichment/reinforcement WS</li> <li>• Foldables</li> </ul>	<b>Media Resources</b> <ul style="list-style-type: none"> <li>• Interactive Classroom CD-ROM (ppt's)</li> <li>• Section Focus transparencies</li> <li>• Teaching transparencies</li> <li>• Math Skills transparencies</li> <li>• Virtual Chemistry Lab CD-ROM</li> <li>• Internet labs and resources</li> </ul>
<b>Assessment Activities</b> Test Chapter 2 Problem Set #3 WS's-Metric conversions, Significant figures, Density calculations Lab report	<b>Completion date:</b>  <b>Completed by:</b>  <b>Comments: <i>Alternative Evaluation:</i></b> Paper, Project, Poster

Week 4	
<b>Performance Standards</b>	
<p><b>Chemistry 1.1:</b> Distinguish between chemical and physical properties  <b>Chemistry 1.2:</b> Explain the differences between pure substances (elements &amp; compounds) and mixtures.  <b>Chemistry 2.3:</b> Interpret &amp; apply the laws of conservation of mass, constant composition, multiple proportions</p>	
<b>Unit/Topic./Lesson</b>	
Matter: Properties & Change <b>3.1</b> Properties of Matter <b>3.2</b> Changes in Matter	
<b>Objectives (Students will...)</b> <b>Identify</b> the characteristics of a pure substance. <b>Distinguish</b> between physical & chemical properties. <b>Differentiate</b> among the physical states of matter. <b>Define</b> physical change and list several common physical changes. <b>Define</b> chemical change and list several indications that a chemical change has taken place. <b>Apply</b> the law of conservation of mass to chemical reactions	<b>Essential Question</b> What are some physical & chemical changes that matter undergoes?  <b>Labs/Demonstrations/Handouts</b> <b>Demo:</b> Electrolysis of Water <b>Lab:</b> ID Products of a Chemical Reaction <b>Handout:</b> Chapter 3 packet
<b>Teacher Resources</b> <ul style="list-style-type: none"> <li>• Glencoe Chemistry: Matter &amp; Change (2008) Chapter 3</li> <li>• Teacher Works Plus DVD</li> <li>• Standardized Test Practice</li> <li>• Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>• Content Outline WS</li> <li>• Transparency Activity WS</li> <li>• Enrichment/reinforcement WS</li> <li>• Foldables</li> </ul>	<b>Media Resources</b> <ul style="list-style-type: none"> <li>• Interactive Classroom CD-ROM (ppt's)</li> <li>• Section Focus transparencies</li> <li>• Teaching transparencies</li> <li>• Math Skills transparencies</li> <li>• Virtual Chemistry Lab CD-ROM</li> <li>• Internet labs and resources</li> </ul>
<b>Assessment Activities</b> Problem Set #3 WS-Chemical & Physical Changes Lab report	<b>Completion date:</b>  <b>Completed by:</b>  <b>Comments: <i>Alternative Evaluation:</i></b> Paper, Project, Poster

Week 5	
<b>Performance Standards</b>	
<p><b>Chemistry 1.1:</b> Distinguish between chemical and physical properties</p> <p><b>Chemistry 1.2:</b> Explain the differences between pure substances (elements &amp; compounds) and mixtures.</p> <p><b>Chemistry 2.3:</b> Interpret &amp; apply the laws of conservation of mass, constant composition, multiple proportions</p>	
<b>Unit/Topic./Lesson</b>	
<p>Matter: Properties &amp; Change</p> <p><b>3.3</b> Mixtures in Matter</p> <p><b>3.4</b> Elements &amp; Compounds</p>	
<b>Objectives (Students will...)</b>	<b>Essential Question</b>
<p><b>Contrast</b> mixtures and substances</p> <p><b>Classify</b> mixtures as homogeneous or heterogeneous.</p> <p><b>List &amp; Describe</b> several techniques used to separate mixtures.</p> <p><b>Distinguish</b> between elements and compounds.</p> <p><b>Describe</b> the organization of elements in the periodic table.</p> <p><b>Explain</b> how all compounds obey the laws of definite proportions &amp; multiple proportions</p>	<p>What is the difference between an element and a compound?</p>
	<b>Labs/Demonstrations/Handouts</b>
<b>Teacher Resources</b>	<b>Media Resources</b>
<ul style="list-style-type: none"> <li>• Glencoe Chemistry: Matter &amp; Change (2008) Chapter 3</li> <li>• Teacher Works Plus DVD</li> <li>• Standardized Test Practice</li> <li>• Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>• Content Outline WS</li> <li>• Transparency Activity WS</li> <li>• Enrichment/reinforcement WS</li> <li>• Foldables</li> </ul>	<ul style="list-style-type: none"> <li>• Interactive Classroom CD-ROM (ppt's)</li> <li>• Section Focus transparencies</li> <li>• Teaching transparencies</li> <li>• Math Skills transparencies</li> <li>• Virtual Chemistry Lab CD-ROM</li> <li>• Internet labs and resources</li> </ul>
<b>Assessment Activities</b>	<b>Completion date:</b>
<p>Test Chapter 3</p>	<p><b>Completed by:</b></p> <p><b>Comments:</b> <i>Alternative Evaluation:</i> Paper, Project, Poster</p>

Week 6	
<b>Performance Standards</b>	
<p><b>Chemistry 2.1:</b> Recognize discoveries from Dalton, Thompson, Rutherford and Bohr and understand how each discovery leads to modern atomic theory.</p> <p><b>Chemistry 2.2:</b> Describe Rutherford's Gold Foil experiment. Identify major components of the nuclear atom and how they interact.</p> <p><b>Chemistry 2.5:</b> Identify 3 main types of radioactive decay and compare their properties</p>	
<b>Unit/Topic./Lesson</b>	
<p>The Structure of the Atom</p> <p><b>4.1</b> Early ideas about matter</p> <p><b>4.2</b> Defining the atom</p>	
<b>Objectives (Students will...)</b>	<b>Essential Question</b>
<p><b>Compare &amp; Contrast</b> the atomic models of Democritus, Aristotle, and Dalton.</p> <p><b>Understand</b> how Dalton's theory explains the conservation of mass.</p> <p><b>Define</b> atom.</p> <p><b>Distinguish</b> between the subatomic particles in terms of relative charge &amp; mass.</p> <p><b>Describe</b> the structure of the atom, including the locations of the subatomic particles.</p>	<p>What is the fundamental building block of nature?</p>
	<b>Labs/Demonstrations/Handouts</b>
<b>Teacher Resources</b>	<b>Media Resources</b>
<ul style="list-style-type: none"> <li>• Glencoe Chemistry: Matter &amp; Change (2008) Chapter 4</li> <li>• Teacher Works Plus DVD</li> <li>• Standardized Test Practice</li> <li>• Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>• Content Outline WS</li> <li>• Transparency Activity WS</li> <li>• Enrichment/reinforcement WS</li> <li>• Foldables</li> </ul>	<ul style="list-style-type: none"> <li>• Interactive Classroom CD-ROM (ppt's)</li> <li>• Section Focus transparencies</li> <li>• Teaching transparencies</li> <li>• Math Skills transparencies</li> <li>• Virtual Chemistry Lab CD-ROM</li> <li>• Internet labs and resources</li> </ul>
<b>Assessment Activities</b>	<b>Completion date:</b>
<p>Problem Set #4, WS-Ions &amp; Isotopes</p>	<p><b>Completed by:</b></p> <p><b>Comments:</b> <i>Alternative Evaluation:</i> Paper, Project, Poster</p>

Week 7	
<b>Performance Standards</b>	
<p><b>Chemistry 2.2:</b> Describe Rutherford's Gold Foil experiment. Identify major components of the nuclear atom and how they interact.</p> <p><b>Chemistry 2.5:</b> Identify 3 main types of radioactive decay and compare their properties.</p>	
<b>Unit/Topic./Lesson</b>	
<p>The Structure of the Atom</p> <p><b>4.3</b> How atoms differ</p> <p><b>4.4</b> Unstable nuclei &amp; radioactive decay</p>	
<b>Objectives (Students will...)</b>	<b>Essential Question</b>
<p><b>List</b> the conditions necessary for fossils to form.</p> <p><b>Describe</b> several processes of fossil formation.</p> <p><b>Explain</b> how fossil correlation is used to <b>determine</b> rock ages.</p> <p><b>Determine</b> how fossils can be used to <b>explain</b> changes in Earth's surface, life forms, and environment.</p>	<p>What is an isotope and how does it relate to radioactive decay?</p>
	<b>Labs/Demonstrations/Handouts</b>
	<p><b>Lab:</b> The Golden Penny</p> <p><b>Handout:</b> Chapter 5 packet</p>
<b>Teacher Resources</b>	<b>Media Resources</b>
<ul style="list-style-type: none"> <li>• Glencoe Chemistry: Matter &amp; Change (2008) Chapter 4</li> <li>• Teacher Works Plus DVD</li> <li>• Standardized Test Practice</li> <li>• Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>• Content Outline WS</li> <li>• Transparency Activity WS</li> <li>• Enrichment/reinforcement WS</li> <li>• Foldables</li> </ul>	<ul style="list-style-type: none"> <li>• Interactive Classroom CD-ROM (ppt's)</li> <li>• Section Focus transparencies</li> <li>• Teaching transparencies</li> <li>• Math Skills transparencies</li> <li>• Virtual Chemistry Lab CD-ROM</li> <li>• Internet labs and resources</li> </ul>
<b>Assessment Activities</b>	<b>Completion date:</b>
<p>Test Chapter 4</p> <p>Problem Set #4</p> <p>POGIL - Ions &amp; Isotopes</p> <p>WS3 ions &amp; subatomic particles</p> <p>Lab report</p>	<p><b>Completed by:</b></p> <p><b>Comments:</b> <i>Alternative Evaluation:</i> Paper, Project, Poster</p>

Week 8	
<b>Performance Standards</b>	
<p><b>Chemistry 2.1:</b> Recognize discoveries from Dalton, Thompson, Rutherford and Bohr and understand how each discovery leads to modern atomic theory.</p>	
<b>Unit/Topic./Lesson</b>	
<p>Electrons in Elements</p> <p><b>5.1</b> Light &amp; quantized energy</p> <p><b>5.2</b> Quantum theory &amp; the atom</p>	
<b>Objectives (Students will...)</b>	<b>Essential Question</b>
<p><b>Compare</b> the wave and particle natures of light.</p> <p><b>Define</b> the quantum of energy and explain how it is related to an energy change of matter.</p> <p><b>Contrast</b> continuous electromagnetic spectra and atomic emission spectra.</p> <p><b>Compare</b> the Bohr and quantum mechanical models of the atom.</p> <p><b>Identify</b> the relationships among a hydrogen atom's energy level, sublevels, and atomic orbitals.</p>	<p>Why does each element have a unique electron configuration?</p>
	<b>Labs/Demonstrations/Handouts</b>
	<p><b>Lab:</b> Flame Tests</p>
<b>Teacher Resources</b>	<b>Media Resources</b>
<ul style="list-style-type: none"> <li>• Glencoe Chemistry: Matter &amp; Change (2008) Chapter 5</li> <li>• Teacher Works Plus DVD</li> <li>• Standardized Test Practice</li> <li>• Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>• Content Outline WS</li> <li>• Transparency Activity WS</li> <li>• Enrichment/reinforcement WS</li> <li>• Foldables</li> </ul>	<ul style="list-style-type: none"> <li>• Interactive Classroom CD-ROM (ppt's)</li> <li>• Section Focus transparencies</li> <li>• Teaching transparencies</li> <li>• Math Skills transparencies</li> <li>• Virtual Chemistry Lab CD-ROM</li> <li>• Internet labs and resources</li> </ul>
<b>Assessment Activities</b>	<b>Completion date:</b>
<p>WS1 The Electromagnetic Spectrum</p> <p>WS2 Interpreting Waves</p> <p>WS3 Developing Atomic Theory</p> <p>Lab report</p>	<p><b>Completed by:</b></p> <p><b>Comments:</b> <i>Alternative Evaluation:</i> Paper, Project, Poster</p>

Week 9	
<b>Performance Standards</b>	
<b>Chemistry 2.4:</b> Write the electron configuration for the first 20 elements	
<b>Unit/Topic./Lesson</b>	
Electrons in Elements 5.2 Quantum theory & the atom 5.3 Electron configuration	
<b>Objectives (Students will...)</b>	<b>Essential Question</b>
<p><b>Compare</b> the wave and particle natures of light.</p> <p><b>Define</b> the quantum of energy and explain how it is related to an energy change of matter.</p> <p><b>Contrast</b> continuous electromagnetic spectra and atomic emission spectra.</p> <p><b>Compare</b> the Bohr and quantum mechanical models of the atom.</p> <p><b>Identify</b> the relationships among a hydrogen atom's energy level, sublevels, and atomic orbitals.</p>	Can you apply the three rules to write an electron configuration of an element?
	<b>Labs/Demonstrations/Handouts</b>
	<b>Lab:</b> electron configuration dry lab
<b>Teacher Resources</b>	<b>Media Resources</b>
<ul style="list-style-type: none"> <li>Glencoe Chemistry: Matter &amp; Change (2008) Chapter 5</li> <li>Teacher Works Plus DVD</li> <li>Standardized Test Practice</li> <li>Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>Content Outline WS</li> <li>Transparency Activity WS</li> <li>Enrichment/reinforcement WS</li> <li>Foldables</li> </ul>	<ul style="list-style-type: none"> <li>Interactive Classroom CD-ROM (ppt's)</li> <li>Section Focus transparencies</li> <li>Teaching transparencies</li> <li>Math Skills transparencies</li> <li>Virtual Chemistry Lab CD-ROM</li> <li>Internet labs and resources</li> </ul>
<b>Assessment Activities</b>	<b>Completion date:</b>
Test Chapter 5 Problem Set #5 WS4 Atomic orbitals WS5 Molecular orbital sequence & energy levels Lab report	<p><b>Completed by:</b></p> <p><b>Comments:</b> <i>Alternative Evaluation:</i> Paper, Project, Poster</p>

Week 10	
<b>Performance Standards</b>	
<b>Chemistry 3.1:</b> Explain the relationship of an element's position on the periodic table to its atomic number and mass	
<b>Chemistry 3.2:</b> Use the periodic table to ID metals, nonmetals, metalloids, families (groups)	
<b>Unit/Topic./Lesson</b>	
Periodic Table & Periodic Law 6.1 Developing the periodic table 6.2 Classification of the Elements	
<b>Objectives (Students will...)</b>	<b>Essential Question</b>
<p><b>Explain</b> the impact of de Broglie's wave-particle duality and the Heisenberg uncertainty principle on the current view of electron in atoms.</p> <p><b>Apply</b> the Pauli Exclusion Principle, Aufbau principle, and Hund's rule to write electron configurations using orbital diagrams and electron configuration notation.</p> <p><b>Define</b> valence electrons and draw electron-dot structures representing an atom's valence electrons.</p>	Why do periodic trends in the properties of atoms allow us to predict physical and chemical properties?
	<b>Labs/Demonstrations/Handouts</b>
	<b>Lab:</b> Periodic trends of alkaline earth metals, halogens & Al <b>Handout:</b> Chapter 6 packet
<b>Teacher Resources</b>	<b>Media Resources</b>
<ul style="list-style-type: none"> <li>Glencoe Chemistry: Matter &amp; Change (2008) Chapter 6</li> <li>Teacher Works Plus DVD</li> <li>Standardized Test Practice</li> <li>Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>Content Outline WS</li> <li>Transparency Activity WS</li> <li>Enrichment/reinforcement WS</li> <li>Foldables</li> </ul>	<ul style="list-style-type: none"> <li>Interactive Classroom CD-ROM (ppt's)</li> <li>Section Focus transparencies</li> <li>Teaching transparencies</li> <li>Math Skills transparencies</li> <li>Virtual Chemistry Lab CD-ROM</li> <li>Internet labs and resources</li> </ul>
<b>Assessment Activities</b>	<b>Completion date:</b>
WS1 Development of the periodic table WS2 s, p d, & f block elements Lab report	<p><b>Completed by:</b></p> <p><b>Comments:</b> <i>Alternative Evaluation:</i> Paper, Project, Poster</p>

Week 11		Week 12	
<p align="center"><b>Performance Standards</b></p> <p><b>Chemistry 3.3:</b> Relate the position of an element to its electron configuration</p> <p><b>Chemistry 3.4:</b> ID trends on the periodic table (ionization energy, electro negativity, and relative size of atoms &amp; ions).</p>		<p align="center"><b>Performance Standards</b></p> <p><b>Chemistry 4.1:</b> Explain how atoms combine to form compounds through both ionic &amp; covalent bonding</p> <p><b>Chemistry 4.2:</b> Draw Lewis dot structures for simple molecules &amp; ions</p>	
<p align="center"><b>Unit/Topic./Lesson</b></p> <p>Periodic Table &amp; Periodic Law  <b>6.2</b> Classification of the Elements  <b>6.3</b> Periodic Trends</p>		<p align="center"><b>Unit/Topic./Lesson</b></p> <p>Ionic Compounds &amp; Metals  <b>7.1</b> Ion Formation  <b>7.2</b> Ionic Bonds &amp; Ionic Compounds</p>	
<p align="center"><b>Objectives (Students will...)</b></p> <p><b>Identify</b> the four blocks of the periodic table based on their electron configuration.  <b>Compare</b> period and group trends of several properties.  <b>Relate</b> period and group trends in atomic radii to electron configuration.</p>	<p align="center"><b>Essential Question</b></p> <p>What are the trends among elements in the periodic table related to an elements size and ability to lose or gain electrons?</p>	<p align="center"><b>Objectives (Students will...)</b></p> <p><b>Define</b> a chemical bond.  <b>Describe</b> the formation of positive &amp; negative ions.  <b>Relate</b> ion formation with their electron configuration.  <b>Describe</b> the structure of ionic compounds and formation of ionic bonds.</p>	<p align="center"><b>Essential Question</b></p> <p>How are atoms in ionic compounds held together?</p>
	<b>Labs/Demonstrations/Handouts</b>		<b>Labs/Demonstrations/Handouts</b>
			<p><b>Demo:</b> CaCl<sub>2</sub> + H<sub>2</sub>O Hardness  <b>Lab:</b> Periodic Trends Lab  <b>Handout:</b> Chapter 7 packet</p>
<p align="center"><b>Teacher Resources</b></p> <ul style="list-style-type: none"> <li>Glencoe Chemistry: Matter &amp; Change (2008) Chapter 6</li> <li>Teacher Works Plus DVD</li> <li>Standardized Test Practice</li> <li>Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>Content Outline WS</li> <li>Transparency Activity WS</li> <li>Enrichment/reinforcement WS</li> <li>Foldables</li> </ul>	<p align="center"><b>Media Resources</b></p> <ul style="list-style-type: none"> <li>Interactive Classroom CD-ROM (ppt's)</li> <li>Section Focus transparencies</li> <li>Teaching transparencies</li> <li>Math Skills transparencies</li> <li>Virtual Chemistry Lab CD-ROM</li> <li>Internet labs and resources</li> </ul>	<p align="center"><b>Teacher Resources</b></p> <ul style="list-style-type: none"> <li>Glencoe Chemistry: Matter &amp; Change (2008) Chapter 7</li> <li>Teacher Works Plus DVD</li> <li>Standardized Test Practice</li> <li>Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>Content Outline WS</li> <li>Transparency Activity WS</li> <li>Enrichment/reinforcement WS</li> <li>Foldables</li> </ul>	<p align="center"><b>Media Resources</b></p> <ul style="list-style-type: none"> <li>Interactive Classroom CD-ROM (ppt's)</li> <li>Section Focus transparencies</li> <li>Teaching transparencies</li> <li>Math Skills transparencies</li> <li>Virtual Chemistry Lab CD-ROM</li> <li>Internet labs and resources</li> </ul>
<p align="center"><b>Assessment Activities</b></p> <p>Test Chapter 6  Problem Set #6  POGIL - Periodic Trends  WS3 atomic &amp; ionic radius  WS4 First &amp; Successive ionization energies  Lab report</p>	<p><b>Completion date:</b></p> <p><b>Completed by:</b></p> <p><b>Comments: <i>Alternative Evaluation:</i></b>  Paper, Project, Poster</p>	<p align="center"><b>Assessment Activities</b></p> <p>POGIL - Drawing Lewis Dot Structures  WS1 formation of ions  WS2 ionic bonds  Lab report</p>	<p><b>Completion date:</b></p> <p><b>Completed by:</b></p> <p><b>Comments: <i>Alternative Evaluation:</i></b>  Paper, Project, Poster</p>

Week 13		Week 14	
<b>Performance Standards</b>		<b>Performance Standards</b>	
<b>Chemistry 4.6:</b> Name & write the chemical formulas for simple ionic and molecular compounds including polyatomic ions.		<b>Chemistry 4.6:</b> Name & write the chemical formulas for simple ionic and molecular compounds including polyatomic ions.	
<b>Unit/Topic./Lesson</b>		<b>Unit/Topic./Lesson</b>	
Ionic Compounds & Metals <b>7.3</b> Names & Formulas for Ionic Compounds <b>7.4</b> Metallic Bonds & Properties of Metals		Covalent Bonding <b>8.1</b> The Covalent Bond <b>8.2</b> Naming Molecules <b>8.3</b> Molecular Structures	
<b>Objectives (Students will...)</b>	<b>Essential Question</b>	<b>Objectives (Students will...)</b>	<b>Essential Question</b>
<b>Generalize</b> about strength in ionic bonds based on physical props of ionic compounds <b>Categorize</b> ionic bond formation as exo or endothermic <b>Relate</b> a formula unit of an ionic compound to its composition <b>Write</b> formulas of ionic compounds. <b>Describe</b> a metallic bond.	How do you write the chemical names and chemical formulas of ionic compounds?	<b>Apply the</b> octet rule to atoms forming covalent bonds. <b>Describe</b> the formation of single, double & triple covalent bonds <b>Contrast</b> sigma & pi bonds. Relate bond strength to bond length & bond dissociation energy. <b>Translate</b> molecular formulas into binary molecular compound names <b>Name</b> acidic solutions. <b>List</b> the basic steps used to draw Lewis Structures. <b>Explain</b> why resonance occurs, and identify resonance structures	Why do covalent bonds form?
	<b>Labs/Demonstrations/Handouts</b>		<b>Labs/Demonstrations/Handouts</b>
	<b>Lab:</b> Periodic Trends Lab (cont.)		<b>Handout:</b> Chapter 8 packet <b>Lab:</b> Moisture content of popcorn lab
<b>Teacher Resources</b>	<b>Media Resources</b>	<b>Teacher Resources</b>	<b>Media Resources</b>
<ul style="list-style-type: none"> <li>Glencoe Chemistry: Matter &amp; Change (2008) Chapter 7</li> <li>Teacher Works Plus DVD</li> <li>Standardized Test Practice</li> <li>Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>Content Outline WS</li> <li>Transparency Activity WS</li> <li>Enrichment/reinforcement WS</li> <li>Foldables</li> </ul>	<ul style="list-style-type: none"> <li>Interactive Classroom CD-ROM (ppt's)</li> <li>Section Focus transparencies</li> <li>Teaching transparencies</li> <li>Math Skills transparencies</li> <li>Virtual Chemistry Lab CD-ROM</li> <li>Internet labs and resources</li> </ul>	<ul style="list-style-type: none"> <li>Glencoe Chemistry: Matter &amp; Change (2008) Chapter 8</li> <li>Teacher Works Plus DVD</li> <li>Standardized Test Practice</li> <li>Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>Content Outline WS</li> <li>Transparency Activity WS</li> <li>Enrichment/reinforcement WS</li> <li>Foldables</li> </ul>	<ul style="list-style-type: none"> <li>Interactive Classroom CD-ROM (ppt's)</li> <li>Section Focus transparencies</li> <li>Teaching transparencies</li> <li>Math Skills transparencies</li> <li>Virtual Chemistry Lab CD-ROM</li> <li>Internet labs and resources</li> </ul>
<b>Assessment Activities</b>	<b>Completion date:</b>	<b>Assessment Activities</b>	<b>Completion date:</b>
Test Chapter 7 Problem Set #7 WS3 formulas for ionic compounds WS4 metallic bonds Lab report	<b>Completed by:</b>  <b>Comments:</b> <i>Alternative Evaluation:</i> Paper, Project, Poster	WS-Nomenclature WS1 Naming Binary Compounds WS2 Lewis Structures Lab report	<b>Completed by:</b>  <b>Comments:</b> <i>Alternative Evaluation:</i> Paper, Project, Poster

Week 15		Week 16	
<p align="center"><b>Performance Standards</b></p> <p><b>Chemistry 4.3:</b> Use electro-negativity to explain the difference between polar &amp; non-polar covalent bonds</p> <p><b>Chemistry 4.4:</b> Use VSEPR to predict molecular geometry</p>		<p align="center"><b>Performance Standards</b></p> <p><b>Chemistry 5.1:</b> Balance chemical equations by applying the law of conservation of mass</p> <p><b>Chemistry 5.2:</b> Classify chemical reactions as synthesis, decomposition, single replacement, double replacement, or combustion.</p>	
<p align="center"><b>Unit/Topic./Lesson</b></p> <p>Covalent Bonding  <b>8.4</b> Molecular Structures  <b>8.5</b> Molecular Shapes  <b>8.6</b> Electro-negativity &amp; Polarity</p>		<p align="center"><b>Unit/Topic./Lesson</b></p> <p>Chemical Reactions  <b>9.1</b> Reactions &amp; Equations  <b>9.2</b> Classifying Chemical Reactions  <b>9.3</b> Reactions in Aqueous Solutions</p>	
<p align="center"><b>Objectives (Students will...)</b></p> <p><b>Identify</b> three exceptions to the octet rule and name molecules in which they occur.  <b>Summarize</b> The VSEPR bonding theory.  <b>Predict</b> the shape of, and the bond angles in a molecule.  <b>Define</b> hybridization.  <b>Describe</b> how electro-negativity is used to determine bond types.  <b>Compare &amp; Contrast</b> polar &amp; non-polar covalent bonds and molecules.  <b>Generalize</b> about the characteristics of covalently bonded compounds.</p>	<p align="center"><b>Essential Question</b></p> <p>Why do you draw structural formulas of molecules?</p>	<p align="center"><b>Objectives (Students will...)</b></p> <p><b>Recognize</b> evidence of chemical change  <b>Represent</b> chemical reactions with equations.  <b>Balance</b> chemical equations.  <b>Classify</b> chemical reactions  <b>Identify</b> the characteristics of different chemical reactions.  Describe aqueous solutions.  <b>Write</b> complete ionic and net ionic equations for chemical reactions in aqueous solutions.  <b>Predict</b> whether reactions in aqueous solutions will produce a precipitate, water, or a gas.</p>	<p align="center"><b>Essential Question</b></p> <p>What are the names of the 5 types of chemical reactions and how is each different?</p>
	<p align="center"><b>Labs/Demonstrations/Handouts</b></p> <p><b>Lab:</b> Silly Putty</p>		<p align="center"><b>Labs/Demonstrations/Handouts</b></p> <p><b>Handout:</b> Chapter 9 packet  <b>Lab:</b> Making a Precipitate</p>
<p align="center"><b>Teacher Resources</b></p> <ul style="list-style-type: none"> <li>• Glencoe Chemistry: Matter &amp; Change (2008) Chapter 8</li> <li>• Teacher Works Plus DVD</li> <li>• Standardized Test Practice</li> <li>• Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>• Content Outline WS</li> <li>• Transparency Activity WS</li> <li>• Enrichment/reinforcement WS</li> <li>• Foldables</li> </ul>	<p align="center"><b>Media Resources</b></p> <ul style="list-style-type: none"> <li>• Interactive Classroom CD-ROM (ppt's)</li> <li>• Section Focus transparencies</li> <li>• Teaching transparencies</li> <li>• Math Skills transparencies</li> <li>• Virtual Chemistry Lab CD-ROM</li> <li>• Internet labs and resources</li> </ul>	<p align="center"><b>Teacher Resources</b></p> <ul style="list-style-type: none"> <li>• Glencoe Chemistry: Matter &amp; Change (2008) Chapter 9</li> <li>• Teacher Works Plus DVD</li> <li>• Standardized Test Practice</li> <li>• Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>• Content Outline WS</li> <li>• Transparency Activity WS</li> <li>• Enrichment/reinforcement WS</li> <li>• Foldables</li> </ul>	<p align="center"><b>Media Resources</b></p> <ul style="list-style-type: none"> <li>• Interactive Classroom CD-ROM (ppt's)</li> <li>• Section Focus transparencies</li> <li>• Teaching transparencies</li> <li>• Math Skills transparencies</li> <li>• Virtual Chemistry Lab CD-ROM</li> <li>• Internet labs and resources</li> </ul>
<p align="center"><b>Assessment Activities</b></p> <p>Test Chapter 8  Problem Set #8  POGIL – Lewis Dot Structures  WS3 VSEPR Modeling &amp; Geometry  WS4 Electro-negativity &amp; polarity</p>	<p><b>Completion date:</b></p> <p><b>Completed by:</b></p> <p><b>Comments:</b> <i>Alternative Evaluation:</i>  Paper, Project, Poster</p>	<p align="center"><b>Assessment Activities</b></p> <p>WS1 Parts of a Balanced Chemical Equation  WS2 Activity Series  Lab report</p>	<p><b>Completion date:</b></p> <p><b>Completed by:</b></p> <p><b>Comments:</b> <i>Alternative Evaluation:</i>  Paper, Project, Poster</p>

Week 17	
<b>Performance Standards</b>	
<b>Chemistry 5.2:</b> Classify chemical reactions as synthesis, decomposition, single replacement, double replacement, or combustion.	
<b>Unit/Topic./Lesson</b>	
Chemical Reactions <b>9.4</b> Reactions in Aqueous Solutions	
<b>Objectives (Students will...)</b> <b>Explain</b> how a mole is used to indirectly count the # of particles of matter. <b>Relate</b> the mole to a common everyday counting unit. <b>Convert</b> between moles and number of representative particles. <b>Relate</b> the mass of an atom to the mass of a mole of atoms. <b>Convert</b> between number of moles and the mass of an element. <b>Convert</b> between number of moles and number of atoms of an element. <b>Recognize the</b> mole relationships shown by a chemical formula.	<b>Essential Question</b> What is a mole and what do chemists use it for?  <b>Labs/Demonstrations/Handouts</b> <b>Lab:</b> Observing Chemical reactions
<b>Teacher Resources</b> <ul style="list-style-type: none"> <li>Glencoe Chemistry: Matter &amp; Change (2008) Chapter 9</li> <li>Teacher Works Plus DVD</li> <li>Standardized Test Practice</li> <li>Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>Content Outline WS</li> <li>Transparency Activity WS</li> <li>Enrichment/reinforcement WS</li> <li>Foldables</li> </ul>	<b>Media Resources</b> <ul style="list-style-type: none"> <li>Interactive Classroom CD-ROM (ppt's)</li> <li>Section Focus transparencies</li> <li>Teaching transparencies</li> <li>Math Skills transparencies</li> <li>Virtual Chemistry Lab CD-ROM</li> <li>Internet labs and resources</li> </ul>
<b>Assessment Activities</b> Test Chapter 9 Problem Set #9 POGIL – Classifying Chemical Reactions WS3 Types of Chemical Equations Lab report	<b>Completion date:</b>  <b>Completed by:</b>  <b>Comments: <i>Alternative Evaluation:</i></b> Paper, Project, Poster

Week 18	
<b>Performance Standards</b>	
<b>Chemistry 5.3:</b> Use the mole concept to determine the # of particles and the molar mass of elements and compounds	
<b>Chemistry 5.4:</b> Determine percent composition, empirical formula, and molecular formulas.	
<b>Unit/Topic./Lesson</b>	
The Mole <b>10.1</b> Measuring Matter <b>10.2</b> Mass & the Mole <b>10.3</b> Moles of Compounds	
<b>Objectives (Students will...)</b> <b>Calculate</b> the molar mass of a compound. <b>Convert between</b> the number of moles and mass of a compound. <b>Apply</b> conversion factors to determine the # of atoms or ions in a known mass of a compound.	<b>Essential Question</b> What is the difference between a molecular formula and an empirical formula?  <b>Labs/Demonstrations/Handouts</b> <b>Handout:</b> Chapter 10 packet <b>Lab:</b> Examples of Chemical Reactions
<b>Teacher Resources</b> <ul style="list-style-type: none"> <li>Glencoe Chemistry: Matter &amp; Change (2008) Chapter 10</li> <li>Teacher Works Plus DVD</li> <li>Standardized Test Practice</li> <li>Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>Content Outline WS</li> <li>Transparency Activity WS</li> <li>Enrichment/reinforcement WS</li> <li>Foldables</li> </ul>	<b>Media Resources</b> <ul style="list-style-type: none"> <li>Interactive Classroom CD-ROM (ppt's)</li> <li>Section Focus transparencies</li> <li>Teaching transparencies</li> <li>Math Skills transparencies</li> <li>Virtual Chemistry Lab CD-ROM</li> <li>Internet labs and resources</li> </ul>
<b>Assessment Activities</b> WS1 Mass to Moles & particles WS2 Molar Mass of Elements WS3 Molar Mass of Compounds Lab report	<b>Completion date:</b>  <b>Completed by:</b>  <b>Comments: <i>Alternative Evaluation:</i></b> Paper, Project, Poster

Week 19		Week 20	
<b>Performance Standards</b>		<b>Performance Standards</b>	
Chemistry 5.4: Determine percent composition, empirical formula, and molecular formulas.		Chemistry 5.5: Calculate the mass to mass stoichiometry for a chemical reaction	
<b>Unit/Topic./Lesson</b>		<b>Unit/Topic./Lesson</b>	
The Mole 10.4 Empirical & Molecular Compounds 10.5 Formulas for Hydrates		Stoichiometry 11.1 Defining Stoichiometry 11.2 Stoichiometric Calculations	
<b>Objectives (Students will...)</b>	<b>Essential Question</b>	<b>Objectives (Students will...)</b>	<b>Essential Question</b>
<p><b>Explain</b> what is meant by percent composition of a compound.</p> <p><b>Determine</b> the empirical &amp; molecular formulas of a compound by mass % &amp; actual mass data.</p> <p><b>Explain</b> what a hydrate is and relate the name to its composition</p> <p><b>Determine</b> the formula of a hydrate from Lab data.</p>	What is the difference between a molecular formula and empirical formula?	<p><b>Describe</b> the types of relationships in a balanced chemical reaction.</p> <p><b>State</b> the mole ratios of a balanced chemical equation</p> <p><b>List</b> the sequence of steps to solve stoichiometric problems</p> <p><b>Solve</b> stoichiometric problems.</p>	What is a balanced chemical equation?
	<b>Labs/Demonstrations/Handout</b>		<b>Labs/Demonstrations/Handouts</b>
	<b>Lab:</b> Examples of Chemical Reactions		<b>Handout:</b> Chapter 11 Packet <b>Lab:</b> Decomposition of NaHCO <sub>3</sub>
<b>Teacher Resources</b>	<b>Media Resources</b>	<b>Teacher Resources</b>	<b>Media Resources</b>
<ul style="list-style-type: none"> <li>Glencoe Chemistry: Matter &amp; Change (2008) Chapter 10</li> <li>Teacher Works Plus DVD</li> <li>Standardized Test Practice</li> <li>Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>Content Outline WS</li> <li>Transparency Activity WS</li> <li>Enrichment/reinforcement WS</li> <li>Foldables</li> </ul>	<ul style="list-style-type: none"> <li>Interactive Classroom CD-ROM (ppt's)</li> <li>Section Focus transparencies</li> <li>Teaching transparencies</li> <li>Math Skills transparencies</li> <li>Virtual Chemistry Lab CD-ROM</li> <li>Internet labs and resources</li> </ul>	<ul style="list-style-type: none"> <li>Glencoe Chemistry: Matter &amp; Change (2008) Chapter 11</li> <li>Teacher Works Plus DVD</li> <li>Standardized Test Practice</li> <li>Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>Content Outline WS</li> <li>Transparency Activity WS</li> <li>Enrichment/reinforcement WS</li> <li>Foldables</li> </ul>	<ul style="list-style-type: none"> <li>Interactive Classroom CD-ROM (ppt's)</li> <li>Section Focus transparencies</li> <li>Teaching transparencies</li> <li>Math Skills transparencies</li> <li>Virtual Chemistry Lab CD-ROM</li> <li>Internet labs and resources</li> </ul>
<b>Assessment Activities</b>	<b>Completion date:</b>	<b>Assessment Activities</b>	<b>Completion date:</b>
Lab report Problem Set #10 POGIL – Classifying Chemical Reactions WS4 Atoms, Mass & Moles WS5 Empirical Formulas Test Chapter 10	<b>Completed by:</b>  <b>Comments: <i>Alternative Evaluation:</i></b> Paper, Project, Poster	WS1 -Determining Mole Ratios WS2 - Using Mole Ratios Formal lab report	<b>Completed by:</b>  <b>Comments: <i>Alternative Evaluation:</i></b> Paper, Project, Poster

Week 21	
<b>Performance Standards</b>	
<b>Chemistry 5.6:</b> Calculate percent yield in a chemical reaction and understand that this is a measure of the efficiency of a reaction undertaken in the lab.	
<b>Unit/Topic./Lesson</b>	
Stoichiometry 11.3 Stoichiometric Calculations 11.4 Limiting Reactants	
<b>Objectives (Students will...)</b> <b>Identify</b> the limiting reactant in a chemical reaction <b>Identify</b> the excess reactant and calculate the amount remaining after the reaction is complete. <b>Calculate</b> the mass of product when amounts of more than one reactant are given. <b>Calculate</b> theoretical yield & percent yield of a chemical reaction	<b>Essential Question</b> What is the difference between a limiting reactant and an excess reactant?
	<b>Labs/Demonstrations/Handout</b> <b>Lab:</b> Determining the Mole Ratio of a Chemical Reaction
<b>Teacher Resources</b> <ul style="list-style-type: none"> <li>Glencoe Chemistry: Matter &amp; Change (2008) Chapter 11</li> <li>Teacher Works Plus DVD</li> <li>Standardized Test Practice</li> <li>Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>Content Outline WS</li> <li>Transparency Activity WS</li> <li>Enrichment/reinforcement WS</li> <li>Foldables</li> </ul>	<b>Media Resources</b> <ul style="list-style-type: none"> <li>Interactive Classroom CD-ROM (ppt's)</li> <li>Section Focus transparencies</li> <li>Teaching transparencies</li> <li>Math Skills transparencies</li> <li>Virtual Chemistry Lab CD-ROM</li> <li>Internet labs and resources</li> </ul>
<b>Assessment Activities</b> Problem Set # 11 POGIL - Limiting Reactants WS3 - Limiting Reactants WS4 - Solving Actual & Theoretical Yield problems Lab report Test Chapter 11	<b>Completion date:</b> <b>Completed by:</b> <b>Comments: <i>Alternative Evaluation:</i></b> Paper, Project, Poster

Week 22	
<b>Performance Standards</b>	
<b>Chemistry 5.5:</b> Calculate the mass to mass stoichiometry for a chemical reaction	
<b>Unit/Topic./Lesson</b>	
States of Matter 12.1 Gases 12.2 Forces of Attraction	
<b>Objectives (Students will...)</b> <b>Use</b> the kinetic molecular theory to explain the behavior of gases <b>Explain</b> how gas pressure is measured and <b>calculate</b> the partial pressure of a gas. <b>Describe</b> intramolecular forces <b>Compare &amp; contrast</b> intermolecular forces	<b>Essential Question</b> What is a gas and how is it different from a solid or liquid?
	<b>Labs/Demonstrations/Handouts</b> <b>Handout:</b> Chapter 12 Packet <b>Lab:</b> Heating & Cooling Curves
<b>Teacher Resources</b> <ul style="list-style-type: none"> <li>Glencoe Chemistry: Matter &amp; Change (2008) Chapter 12</li> <li>Teacher Works Plus DVD</li> <li>Standardized Test Practice</li> <li>Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>Content Outline WS</li> <li>Transparency Activity WS</li> <li>Enrichment/reinforcement WS</li> <li>Foldables</li> </ul>	<b>Media Resources</b> <ul style="list-style-type: none"> <li>Interactive Classroom CD-ROM (ppt's)</li> <li>Section Focus transparencies</li> <li>Teaching transparencies</li> <li>Math Skills transparencies</li> <li>Virtual Chemistry Lab CD-ROM</li> <li>Internet labs and resources</li> </ul>
<b>Assessment Activities</b> POGIL - Phase Changes WS1 Manometers WS2 Unit Cells Lab Report	<b>Completion date:</b> <b>Completed by:</b> <b>Comments: <i>Alternative Evaluation:</i></b> Paper, Project, Poster

Week 23	
<b>Performance Standards</b>	
<b>Chemistry 4.5: Identify</b> how hydrogen bonding in water affects a variety of physical chemical and biological phenomena	
<b>Unit/Topic./Lesson</b>	
States of Matter 12.3 Liquids & Solids 12.4 Phase Changes	
<b>Objectives (Students will...)</b> <b>Contrast</b> the arrangement of particles in a gas, liquid & solid. <b>Explain</b> how the unit cell and crystal lattice are related. <b>Explain</b> how the addition & removal of energy causes phase changes. <b>Interpret</b> phase diagrams	<b>Essential Question</b> What is a phase diagram?
	<b>Labs/Demonstrations/Handout</b> <b>Lab:</b> Measuring the vapor Pressure of Water
<b>Teacher Resources</b> <ul style="list-style-type: none"> <li>• Glencoe Chemistry: Matter &amp; Change (2008) Chapter 12</li> <li>• Teacher Works Plus DVD</li> <li>• Standardized Test Practice</li> <li>• Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>• Content Outline WS</li> <li>• Transparency Activity WS</li> <li>• Enrichment/reinforcement WS</li> <li>• Foldables</li> </ul>	<b>Media Resources</b> <ul style="list-style-type: none"> <li>• Interactive Classroom CD-ROM (ppt's)</li> <li>• Section Focus transparencies</li> <li>• Teaching transparencies</li> <li>• Math Skills transparencies</li> <li>• Virtual Chemistry Lab CD-ROM</li> <li>• Internet labs and resources</li> </ul>
<b>Assessment Activities</b> Test Chapter 12 PS#12 WS3 Phase Diagrams Lab Report	<b>Completion date:</b> <b>Completed by:</b> <b>Comments: <i>Alternative Evaluation:</i></b> Paper, Project, Poster

Week 24	
<b>Performance Standards</b>	
<b>Chemistry 6.1:</b> Using the kinetic molecular theory, <b>explain</b> Boyle's law, Charles' law, and Avogadro's hypothesis.	
<b>Chemistry 6.2: Perform</b> calculations using the ideal gas law. <b>Understand</b> the molar volume at 273K and 1atm(STP)	
<b>Unit/Topic./Lesson</b>	
Gases 13.1 The Gas Laws 13.2 The Ideal Gas Law 13.3 Gas Stoichiometry	
<b>Objectives (Students will...)</b> <b>State</b> the relationship between pressure, volume and temperature. <b>Apply</b> the gas laws to problems involving pressure, temp & volume of a gas. <b>Relate</b> the number of particles and volume to Avogadro's principle. <b>Relate</b> the amount of gas to its pressure, temp & volume using the ideal gas law. <b>Compare</b> real vs., ideal gases <b>Apply</b> the gas laws to calculate amount of gaseous reactants and products in a chemical reaction.	<b>Essential Question</b> How is the amount of a gas in moles related to its volume?
	<b>Labs/Demonstrations/Handouts</b> <b>Handout:</b> Chapter 13 Packet <b>Lab:</b> The Volume of 1 Mole of Hydrogen Gas <b>Lab:</b> The Density of CO <sub>2</sub>
<b>Teacher Resources</b> <ul style="list-style-type: none"> <li>• Glencoe Chemistry: Matter &amp; Change (2008) Chapter 13</li> <li>• Teacher Works Plus DVD</li> <li>• Standardized Test Practice</li> <li>• Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>• Content Outline WS</li> <li>• Transparency Activity WS</li> <li>• Enrichment/reinforcement WS</li> <li>• Foldables</li> </ul>	<b>Media Resources</b> <ul style="list-style-type: none"> <li>• Interactive Classroom CD-ROM (ppt's)</li> <li>• Section Focus transparencies</li> <li>• Teaching transparencies</li> <li>• Math Skills transparencies</li> <li>• Virtual Chemistry Lab CD-ROM</li> <li>• Internet labs and resources</li> </ul>
<b>Assessment Activities</b> POGIL Kinetic Molecular Theory WS1 Volume v. Pressure Graph WS2 Boyle's Law Problems Lab Report Test Chapter 13	<b>Completion date:</b> <b>Completed by:</b> <b>Comments: <i>Alternative Evaluation:</i></b> Paper, Project, Poster

Week 25		Week 26	
<b>Performance Standards</b>		<b>Performance Standards</b>	
<p><b>Chemistry 7.2: Calculate</b> concentration in terms of molarity. Use molarity to perform solution dilution and solution stoichiometry.</p> <p><b>Chemistry 7.3: Identify</b> and <b>explain</b> the factors that affect the rate of dissolving</p>		<p><b>Chemistry 7.1: Describe</b> the process by which solutes dissolve in solvents.</p> <p><b>Chemistry 7.4: Compare</b> and <b>contrast</b> qualitatively the properties of solutions and pure solvents (colligative properties such as boiling point and freezing point).</p>	
<b>Unit/Topic./Lesson</b>		<b>Unit/Topic./Lesson</b>	
Mixtures and Solutions <b>14.1</b> Types of Mixtures <b>14.2</b> Solution Concentration		Mixtures and Solutions <b>14.3</b> Factors Affecting Solvation <b>14.4</b> Colligative Properties of Solutions	
<b>Objectives (Students will...)</b>	<b>Essential Question</b>	<b>Objectives (Students will...)</b>	<b>Essential Question</b>
<p><b>Compare</b> the properties of suspensions, colloids and solutions.</p> <p><b>Identify</b> types of colloids &amp; solutions</p> <p><b>Describe</b> concentration using different units.</p> <p><b>Determine</b> concentrations of solutions.</p> <p><b>Calculate</b> the molarity of a solution</p>	How can concentration be expressed?	<p><b>Describe</b> solvation and solubility.</p> <p><b>Understand</b> what factors affect solubility.</p> <p><b>Describe</b> colligative properties</p>	Why do solids dissolve?
	<b>Labs/Demonstrations/Handout</b>		<b>Labs/Demonstrations/Handouts</b>
	<p><b>Handout:</b> Chapter 14 Packet</p> <p><b>Lab:</b> The MW of Urea by FPD</p>		<p><b>Lab:</b> Temperature &amp; Solubility of KNO<sub>3</sub></p>
<b>Teacher Resources</b>	<b>Media Resources</b>	<b>Teacher Resources</b>	<b>Media Resources</b>
<ul style="list-style-type: none"> <li>Glencoe Chemistry: Matter &amp; Change (2008) Chapter 14</li> <li>Teacher Works Plus DVD</li> <li>Standardized Test Practice</li> <li>Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>Content Outline WS</li> <li>Transparency Activity WS</li> <li>Enrichment/reinforcement WS</li> <li>Foldables</li> </ul>	<ul style="list-style-type: none"> <li>Interactive Classroom CD-ROM (ppt's)</li> <li>Section Focus transparencies</li> <li>Teaching transparencies</li> <li>Math Skills transparencies</li> <li>Virtual Chemistry Lab CD-ROM</li> <li>Internet labs and resources</li> </ul>	<ul style="list-style-type: none"> <li>Glencoe Chemistry: Matter &amp; Change (2008) Chapter 14</li> <li>Teacher Works Plus DVD</li> <li>Standardized Test Practice</li> <li>Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>Content Outline WS</li> <li>Transparency Activity WS</li> <li>Enrichment/reinforcement WS</li> <li>Foldables</li> </ul>	<ul style="list-style-type: none"> <li>Interactive Classroom CD-ROM (ppt's)</li> <li>Section Focus transparencies</li> <li>Teaching transparencies</li> <li>Math Skills transparencies</li> <li>Virtual Chemistry Lab CD-ROM</li> <li>Internet labs and resources</li> </ul>
<b>Assessment Activities</b>	<b>Completion date:</b>	<b>Assessment Activities</b>	<b>Completion date:</b>
POGIL Solubility & Net Ionic Equations WS1 Percent by Mass, Mole Fraction (X) & molality (m) WS2 Solubility v. Temperature Graphs Lab Report	<p><b>Completed by:</b></p> <p><b>Comments:</b> <i>Alternative Evaluation:</i> Paper, Project, Poster</p>	Test Chapter 14 PS#14 WS3 Phase Diagrams of Solvents Solutions WS4 Colligative Properties: FPD & BPE Lab Report	<p><b>Completed by:</b></p> <p><b>Comments:</b> <i>Alternative Evaluation:</i> Paper, Project, Poster</p>

Week 27	
<b>Performance Standards</b>	
<b>Chemistry 6.4:</b> Describe the law of conservation of energy. <b>Explain</b> the difference between exothermic and endothermic processes	
<b>Unit/Topic./Lesson</b>	
Energy & Chemical Change 15.1 Energy 15.2 Heat	
<b>Objectives (Students will...)</b> <b>Define</b> energy <b>Distinguish</b> between kinetic & potential energy <b>Relate</b> chemical potential energy to heat gain or loss from a chemical reaction <b>Describe</b> how a calorimeter is used to measure energy that is absorbed or released. <b>Explain</b> enthalpy in chemical reactions <b>Calculate</b> the heat gained or lost in a chemical reaction	<b>Essential Question</b> What is Energy?
	<b>Labs/Demonstrations/Handout</b> <b>Handout:</b> Chapter 15 Packet <b>Lab:</b> The Heat of Fusion of Ice
<b>Teacher Resources</b> <ul style="list-style-type: none"> <li>Glencoe Chemistry: Matter &amp; Change (2008) Chapter 15</li> <li>Teacher Works Plus DVD</li> <li>Standardized Test Practice</li> <li>Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>Content Outline WS</li> <li>Transparency Activity WS</li> <li>Enrichment/reinforcement WS</li> <li>Foldables</li> </ul>	<b>Media Resources</b> <ul style="list-style-type: none"> <li>Interactive Classroom CD-ROM (ppt's)</li> <li>Section Focus transparencies</li> <li>Teaching transparencies</li> <li>Math Skills transparencies</li> <li>Virtual Chemistry Lab CD-ROM</li> <li>Internet labs and resources</li> </ul>
<b>Assessment Activities</b> POGIL Calorimetry WS1 Using a calorimeter & determining its heat capacity WS2 Temperature changes of water Lab Report	<b>Completion date:</b> <b>Completed by:</b> <b>Comments: <i>Alternative Evaluation:</i></b> Paper, Project, Poster

Week 28	
<b>Performance Standards</b>	
<b>Chemistry 6.5:</b> Recognize that there is a natural tendency for systems to move in a direction of disorder or randomness (entropy).	
<b>Unit/Topic./Lesson</b>	
Energy & Chemical Change 15.3 Thermochemical Equations 15.4 Calculating Enthalpy Change 12.5 Reaction Spontaneity	
<b>Objectives (Students will...)</b> <b>Apply</b> Hess's law to calculate enthalpy change for a reaction <b>Calculate</b> $\Delta H$ using thermochemical equations <b>Differentiate</b> between spontaneous and non-spontaneous reactions <b>Explain</b> how changes in entropy and free energy determine the spontaneity of chemical reactions.	<b>Essential Question</b> What is the reason for a spontaneous chemical reaction?
	<b>Labs/Demonstrations/Handouts</b> <b>Lab:</b> Heating & Cooling Paradichlorobenzene Crystals
<b>Teacher Resources</b> <ul style="list-style-type: none"> <li>Glencoe Chemistry: Matter &amp; Change (2008) Chapter 15</li> <li>Teacher Works Plus DVD</li> <li>Standardized Test Practice</li> <li>Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>Content Outline WS</li> <li>Transparency Activity WS</li> <li>Enrichment/reinforcement WS</li> <li>Foldables</li> </ul>	<b>Media Resources</b> <ul style="list-style-type: none"> <li>Interactive Classroom CD-ROM (ppt's)</li> <li>Section Focus transparencies</li> <li>Teaching transparencies</li> <li>Math Skills transparencies</li> <li>Virtual Chemistry Lab CD-ROM</li> <li>Internet labs and resources</li> </ul>
<b>Assessment Activities</b> Test Chapter 15 PS#15 WS3 Hess's Law WS4 Changes in enthalpy & entropy WS5 Gibbs Free Energy Lab Report	<b>Completion date:</b> <b>Completed by:</b> <b>Comments: <i>Alternative Evaluation:</i></b> Paper, Project, Poster

Week 29	
<b>Performance Standards</b>	
<p><b>Chemistry 7.5 Identify</b> factors that affect the rate of reaction (temperature, mixing, concentration, particle size, surface area, catalyst).</p>	
<b>Unit/Topic./Lesson</b>	
Reaction Rates <b>16.1</b> Chemical Equilibrium <b>16.2</b> Factors Affecting Reaction Rates	
<b>Objectives (Students will...)</b>	<b>Essential Question</b>
<p><b>Calculate</b> average reaction rates from experimental data.  <b>Relate</b> rates of reaction to collisions of particles  <b>Identify</b> factors that affect the rates of reaction  <b>Explain</b> the role of a catalyst</p>	How do you speed up or slow down a chemical reaction?
	<b>Labs/Demonstrations/Handout</b>
	<p><b>Handout:</b> Chapter 16 Packet  <b>Lab:</b> Reaction Rates vs. Concentration</p>
<b>Teacher Resources</b>	<b>Media Resources</b>
<ul style="list-style-type: none"> <li>• Glencoe Chemistry: Matter &amp; Change (2008) Chapter 16</li> <li>• Teacher Works Plus DVD</li> <li>• Standardized Test Practice</li> <li>• Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>• Content Outline WS</li> <li>• Transparency Activity WS</li> <li>• Enrichment/reinforcement WS</li> <li>• Foldables</li> </ul>	<ul style="list-style-type: none"> <li>• Interactive Classroom CD-ROM (ppt's)</li> <li>• Section Focus transparencies</li> <li>• Teaching transparencies</li> <li>• Math Skills transparencies</li> <li>• Virtual Chemistry Lab CD-ROM</li> <li>• Internet labs and resources</li> </ul>
<b>Assessment Activities</b>	<b>Completion date:</b>
POGIL Collision Theory WS1 Factors Affecting Reaction Rates WS2 Det. Reaction Orders Lab Report	<p><b>Completed by:</b></p> <p><b>Comments:</b> <i>Alternative Evaluation:</i>            Paper, Project, Poster</p>

Week 30	
<b>Performance Standards</b>	
<p><b>Chemistry 7.5 Identify</b> factors that affect the rate of reaction (temperature, mixing, concentration, particle size, surface area, catalyst).</p>	
<b>Unit/Topic./Lesson</b>	
Reaction Rates <b>16.3</b> Reaction Rate Laws <b>16.4</b> Instantaneous Reaction Rates & Reaction Mechanisms	
<b>Objectives (Students will...)</b>	<b>Essential Question</b>
<p><b>Express</b> the relationship between reaction rate and concentration  <b>Determine</b> reaction orders using the method of initial rates  <b>Calculate</b> instantaneous rates of a chemical reaction  <b>Understand</b> that many chemical reactions occur in steps.</p>	What does a reaction rate law show?
	<b>Labs/Demonstrations/Handouts</b>
	<p><b>Lab:</b> The Iodine Clock Reaction</p>
<b>Teacher Resources</b>	<b>Media Resources</b>
<ul style="list-style-type: none"> <li>• Glencoe Chemistry: Matter &amp; Change (2008) Chapter 16</li> <li>• Teacher Works Plus DVD</li> <li>• Standardized Test Practice</li> <li>• Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>• Content Outline WS</li> <li>• Transparency Activity WS</li> <li>• Enrichment/reinforcement WS</li> <li>• Foldables</li> </ul>	<ul style="list-style-type: none"> <li>• Interactive Classroom CD-ROM (ppt's)</li> <li>• Section Focus transparencies</li> <li>• Teaching transparencies</li> <li>• Math Skills transparencies</li> <li>• Virtual Chemistry Lab CD-ROM</li> <li>• Internet labs and resources</li> </ul>
<b>Assessment Activities</b>	<b>Completion date:</b>
Test Chapter 16 PS#16 WS3 Reaction Rate of Hydrogen Peroxide, H <sub>2</sub> O <sub>2</sub> Lab Report	<p><b>Completed by:</b></p> <p><b>Comments:</b> <i>Alternative Evaluation:</i>            Paper, Project, Poster</p>

Week 31	
<b>Performance Standards</b>	
<p><b>Chemistry 7.6: Predict</b> the shift in equilibrium when a system is subjected to a stress (LeChatelier's principle) and <b>identify</b> the factors that can cause a shift in equilibrium (concentration, pressure, volume, temperature).</p>	
<b>Unit/Topic./Lesson</b>	
Chemical Equilibrium <b>17.1</b> A State of Dynamic Balance <b>17.2</b> Factors Affecting Chemical Equilibrium	
<b>Objectives (Students will...)</b> <b>Be able</b> to write equilibrium expressions <b>Calculate</b> equilibrium constants from concentration data. <b>Describe</b> how various factors affect equilibria <b>Explain</b> Le Chatelier's Principle	<b>Essential Question</b> What are the characteristics of chemical equilibrium?
	<b>Labs/Demonstrations/Handout</b> <b>Handout:</b> Chapter 17 Packet <b>Lab:</b> The $\text{CoCl}_2$ Equilibrium
<b>Teacher Resources</b> <ul style="list-style-type: none"> <li>Glencoe Chemistry: Matter &amp; Change (2008) Chapter 17</li> <li>Teacher Works Plus DVD</li> <li>Standardized Test Practice</li> <li>Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>Content Outline WS</li> <li>Transparency Activity WS</li> <li>Enrichment/reinforcement WS</li> <li>Foldables</li> </ul>	<b>Media Resources</b> <ul style="list-style-type: none"> <li>Interactive Classroom CD-ROM (ppt's)</li> <li>Section Focus transparencies</li> <li>Teaching transparencies</li> <li>Math Skills transparencies</li> <li>Virtual Chemistry Lab CD-ROM</li> <li>Internet labs and resources</li> </ul>
<b>Assessment Activities</b> WS1 Writing Chemical Equilibria – $K_{eq}$ WS2 How Concentration Affects Chemical Lab Report POGIL Dynamic Equilibrium Equilibrium	<b>Completion date:</b> <b>Completed by:</b> <b>Comments: <i>Alternative Evaluation:</i></b> Paper, Project, Poster

Week 32	
<b>Performance Standards</b>	
<p><b>Chemistry 7.6: Predict</b> the shift in equilibrium when a system is subjected to a stress (LeChatelier's principle) and <b>identify</b> the factors that can cause a shift in equilibrium (concentration, pressure, volume, temperature).</p>	
<b>Unit/Topic./Lesson</b>	
Chemical Equilibrium <b>17.3</b> Using Equilibrium Constants	
<b>Objectives (Students will...)</b> <b>Determine</b> equilibrium concentrations of reactants & products. <b>Calculate</b> the solubility of a compound from its solubility product constant <b>Explain</b> the common Ion effect	<b>Essential Question</b> What is the common ion effect?
	<b>Labs/Demonstrations/Handouts</b> <b>Lab:</b> Le Chatelier's Principle
<b>Teacher Resources</b> <ul style="list-style-type: none"> <li>Glencoe Chemistry: Matter &amp; Change (2008) Chapter 17</li> <li>Teacher Works Plus DVD</li> <li>Standardized Test Practice</li> <li>Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>Content Outline WS</li> <li>Transparency Activity WS</li> <li>Enrichment/reinforcement WS</li> <li>Foldables</li> </ul>	<b>Media Resources</b> <ul style="list-style-type: none"> <li>Interactive Classroom CD-ROM (ppt's)</li> <li>Section Focus transparencies</li> <li>Teaching transparencies</li> <li>Math Skills transparencies</li> <li>Virtual Chemistry Lab CD-ROM</li> <li>Internet labs and resources</li> </ul>
<b>Assessment Activities</b> Test Chapter 17 PS#17 WS3 Using $K_{sp}$ Lab Report	<b>Completion date:</b> <b>Completed by:</b> <b>Comments: <i>Alternative Evaluation:</i></b> Paper, Project, Poster

Week 33	
<b>Performance Standards</b>	
<b>Chemistry 8.1: Define</b> Arrhenius theory of acids and bases in term of the presence of hydronium and hydroxide ions, and Brønsted's theory of acids and bases in terms of proton donor and acceptor and relate these to the pH scale	
<b>Unit/Topic./Lesson</b>	
Acids & Bases 18.1 Intro to Acids & Bases 18.2 Strengths of Acids & Bases	
<b>Objectives (Students will...)</b> <b>Identify</b> properties of acids & bases. <b>Compare</b> Arrhenius, Bronsted-Lowry and Lewis Acids & bases. <b>Relate</b> the strength of an acid or base to its ionization. <b>Compare</b> the strength of a weak acid to the strength of its conjugate base.	<b>Essential Question</b> What is the difference between a strong and weak acid?
	<b>Labs/Demonstrations/Handout</b> <b>Handout:</b> Chapter 18 Packet <b>Lab:</b> Titration of NaOH with HCl
<b>Teacher Resources</b> <ul style="list-style-type: none"> <li>Glencoe Chemistry: Matter &amp; Change (2008) Chapter 18</li> <li>Teacher Works Plus DVD</li> <li>Standardized Test Practice</li> <li>Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>Content Outline WS</li> <li>Transparency Activity WS</li> <li>Enrichment/reinforcement WS</li> <li>Foldables</li> </ul>	<b>Media Resources</b> <ul style="list-style-type: none"> <li>Interactive Classroom CD-ROM (ppt's)</li> <li>Section Focus transparencies</li> <li>Teaching transparencies</li> <li>Math Skills transparencies</li> <li>Virtual Chemistry Lab CD-ROM</li> <li>Internet labs and resources</li> </ul>
<b>Assessment Activities</b> POGIL Intro to Acids & Bases WS1 Triprotic Acids WS2 Ionization Constants & Equations Lab Report	<b>Completion date:</b> <b>Completed by:</b> <b>Comments: <i>Alternative Evaluation:</i></b> Paper, Project, Poster

Week 34	
<b>Performance Standards</b>	
<b>Chemistry 8.2: Relate</b> hydrogen ion concentrations to the pH scale and to acidic, basic, and neutral solutions. Compare and contrast the strengths of various common acids and bases (e.g., vinegar, baking soda, soap, citrus juice).	
<b>Chemistry 8.3: Explain</b> how a buffer works.	
<b>Unit/Topic./Lesson</b>	
Acids & Bases 18.3 Hydrogen ions & pH 18.4 Neutralization	
<b>Objectives (Students will...)</b> <b>Explain</b> pH & pOH <b>Relate</b> pH and pOH to the ion product constant of water. <b>Calculate</b> the pH and pOH of aqueous solutions. <b>Write</b> neutralization reactions. <b>Explain</b> how neutralization reactions are used in titrations <b>Compare</b> properties of buffered and unbuffered solutions.	<b>Essential Question</b> What is pH?
	<b>Labs/Demonstrations/Handouts</b> <b>Lab:</b> Determining Concentration by Titration of an Unknown Acid
<b>Teacher Resources</b> <ul style="list-style-type: none"> <li>Glencoe Chemistry: Matter &amp; Change (2008) Chapter 18</li> <li>Teacher Works Plus DVD</li> <li>Standardized Test Practice</li> <li>Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>Content Outline WS</li> <li>Transparency Activity WS</li> <li>Enrichment/reinforcement WS</li> <li>Foldables</li> </ul>	<b>Media Resources</b> <ul style="list-style-type: none"> <li>Interactive Classroom CD-ROM (ppt's)</li> <li>Section Focus transparencies</li> <li>Teaching transparencies</li> <li>Math Skills transparencies</li> <li>Virtual Chemistry Lab CD-ROM</li> <li>Internet labs and resources</li> </ul>
<b>Assessment Activities</b> Test Chapter 18 PS#18 WS3 pH Scale WS4 Titration Graphs Lab report	<b>Completion date:</b> <b>Completed by:</b> <b>Comments: <i>Alternative Evaluation:</i></b> Paper, Project, Poster

Week 35	
<b>Performance Standards</b>	
<p><b>Chemistry 2.5: Identify</b> the three main types of radioactive decay (alpha, beta, and gamma) and compare their properties (composition, mass, charge, and penetrating power).</p> <p><b>Chemistry 2.6: Describe</b> the process of radioactive decay by using nuclear equations, and <b>explain</b> the concept of half-life for an isotope (for example, C-14 is a powerful tool in determining the age of objects).</p>	
<b>Unit/Topic./Lesson</b>	
Nuclear Chemistry <b>24.1</b> Nuclear Radiation <b>24.2</b> Radioactive Decay	
<b>Objectives (Students will...)</b> <p><b>Summarize</b> the events that led to understanding radiation</p> <p><b>Identify</b> alpha, beta, and gamma radiation in terms of composition and properties</p> <p><b>Explain</b> why certain nuclei are radioactive</p> <p><b>Apply</b> knowledge of radioactive decay to write balanced nuclear equations</p> <p><b>Solve</b> problems involving radioactive decay rates</p>	<b>Essential Question</b> What causes radioactive decay?
	<b>Labs/Demonstrations/Handout</b> <b>Handout:</b> Chapter 24 Packet <b>Lab:</b> Isotopes of M & M's
<b>Teacher Resources</b> <ul style="list-style-type: none"> <li>• Glencoe Chemistry: Matter &amp; Change (2008) Chapter 24</li> <li>• Teacher Works Plus DVD</li> <li>• Standardized Test Practice</li> <li>• Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>• Content Outline WS</li> <li>• Transparency Activity WS</li> <li>• Enrichment/reinforcement WS</li> <li>• Foldables</li> </ul>	<b>Media Resources</b> <ul style="list-style-type: none"> <li>• Interactive Classroom CD-ROM (ppt's)</li> <li>• Section Focus transparencies</li> <li>• Teaching transparencies</li> <li>• Math Skills transparencies</li> <li>• Virtual Chemistry Lab CD-ROM</li> <li>• Internet labs and resources</li> </ul>
<b>Assessment Activities</b> POGIL Intro to Nuclear WS1 Solving Half Life Problems WS2 Balancing Nuclear Equations Lab Report	<b>Completion date:</b> <b>Completed by:</b> <b>Comments: <i>Alternative Evaluation:</i></b> Paper, Project, Poster

Week 36	
<b>Performance Standards</b>	
<p><b>Chemistry 2.7: Compare</b> and <b>contrast</b> nuclear fission and nuclear fusion <b>Calculate</b> the mass to mass stoichiometry for a chemical reaction</p>	
<b>Unit/Topic./Lesson</b>	
Nuclear Chemistry <b>24.3</b> Nuclear Reactions <b>24.4</b> Applications & Effects of Nuclear Reactions	
<b>Objectives (Students will...)</b> <p><b>Understand</b> that mass and energy are related</p> <p><b>Compare</b> and <b>contrast</b> nuclear fission and nuclear fusion</p> <p><b>Explain</b> the process by which nuclear reactors generate electricity</p> <p><b>Describe</b> several methods used to detect and measure radiation</p> <p><b>Explain</b> an application of radiation used in the treatment of a disease</p> <p><b>Describe</b> some of the damaging effects of radiation on biological systems</p>	<b>Essential Question</b> What are some of the harmful biological effects of radiation?
	<b>Labs/Demonstrations/Handouts</b> <b>Lab:</b> The Half-Life of Pennium
<b>Teacher Resources</b> <ul style="list-style-type: none"> <li>• Glencoe Chemistry: Matter &amp; Change (2008) Chapter 24</li> <li>• Teacher Works Plus DVD</li> <li>• Standardized Test Practice</li> <li>• Exam View CD-ROM's Test Generator, Test Manager, Test Player</li> <li>• Content Outline WS</li> <li>• Transparency Activity WS</li> <li>• Enrichment/reinforcement WS</li> <li>• Foldables</li> </ul>	<b>Media Resources</b> <ul style="list-style-type: none"> <li>• Interactive Classroom CD-ROM (ppt's)</li> <li>• Section Focus transparencies</li> <li>• Teaching transparencies</li> <li>• Math Skills transparencies</li> <li>• Virtual Chemistry Lab CD-ROM</li> <li>• Internet labs and resources</li> </ul>
<b>Assessment Activities</b> Test Chapter 24 PS#24 WS3 Producing Trans-uranium elements Lab Report	<b>Completion date:</b> <b>Completed by:</b> <b>Comments: <i>Alternative Evaluation:</i></b> Paper, Project, Poster